

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Air Protection Branch

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NARRATIVE

TO: Hamid Yavari

FROM: Tracey Hiltunen

DATE: February 27, 2023

Facility Name: Rath Refractories

AIRS No.: 009-00044

Location: Milledgeville, GA (Baldwin County)

Application #: 28679

Date of Application: December 22, 2022

Background Information

Rath Refractories is an alumina (Al₂O₃) refractory brick manufacturing facility located at 290 Industrial Park Drive, Milledgeville, Georgia. The facility is classified as a synthetic minor source. It operates under Permit No. 3297-009-0044-S-03-0 issued on February 28, 2014.

Purpose of Application

Application No. 28679 was received on December 22, 2022 and was submitted for a permit amendment to add a new rotary paddle mixer P024 and include it as an emission source in the equipment list in Attachment A of the permit. The equipment list in Attachment A has been updated to include paddle mixer P024 as requested. A public advisory was issued and expired on February 10, 2023.

Updated Equipment List

The equipment list was updated to include the new paddle mixer P024.

Emission	Emission Unit Description	Control	Control Unit Description
Unit ID		Unit ID	
P001	Super Sack Bulk Bags	CD001	Baghouse Dust Collector
P002	Traveling Shuttle Hopper	CD001	Baghouse Dust Collector
P003	Raw Material Storage Silos (31)	CD001	Baghouse Dust Collector
P004	Feeders (31)	CD001	Baghouse Dust Collector
P005	Hopper	CD001	Baghouse Dust Collector
P006	Belt Conveyor	CD001	Baghouse Dust Collector
P007	Receiving Hopper	CD001	Baghouse Dust Collector
P008	Skip Hoist	CD001	Baghouse Dust Collector
P011	Bins	CD001	Baghouse Dust Collector
P012	Eirich Mixers (2)	CD001	Baghouse Dust Collector
P013	Bucket Truck	CD001	Baghouse Dust Collector

Emission	Emission Unit Description	Control	Control Unit Description
Unit ID		Unit ID	
P018	Bin	CD001	Baghouse Dust Collector
P009	3-Way Diverter	N/A	None
P010	3-Way Diverter	N/A	None
P014	Press Hoppers (2)	N/A	None
P015	Laeis Presses (2)	N/A	None
P016	Dryers (2)	N/A	None
P017	Kilns (2)	N/A	None
P019	Screw Conveyor	N/A	None
P020	2-Way Diverter	N/A	None
P021	Agitating Vessels	N/A	None
P022	Dryer	N/A	None
P023	Kiln	N/A	None
P024	Paddle Mixer	N/A	None

Emissions Summary

Facility-Wide Emissions (in tons per year)

	Potential Emissions			
Pollutant	Before Mod.	After Mod.	Emissions Change	
PM/PM ₁₀ /PM _{2.5}	4.44	6.08	1.64	
NOx	144.97	144.97	0	
SO ₂	4.6	4.6	0	
СО	32.2	32.2	0	
VOC	0.53	0.53	0	
Max. Individual HAP	0.5	0.5	0	
Total HAP	0.75	0.75	0	
Total GHG (if applicable)	n/a	n/a	n/a	

Particulate matter (PM) is the pollutant of concern. Emission calculations were submitted by the facility and reviewed by the Division.

Regulatory Applicability

There are no changes in rule applicability associated with this modification.

Permit Conditions

There are no changes in permit conditions associated with this modification. The new paddle mixer will be subject to the existing applicable requirements as stated in the permit.

Summary & Recommendations

I recommend issuing Air Quality Permit Amendment No. 3297-009-0044-S-03-1 to Rath Refractories for the addition of a new rotary paddle mixer and updating the equipment list in Attachment A of the permit. This facility is a synthetic minor source and remains assigned to the SSCP for inspection and enforcement issues. A public advisory was issued and expired February 10, 2023. No comments were received.